



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,177	07/20/2000	James W. Shade	CTH / 108	3895
26875	7590	06/15/2004	EXAMINER	
WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			KING, BRADLEY T	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/620,177

Applicant(s)

SHADE ET AL.

Examin r

Bradley T King

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,10-14,18-21,23-25,27-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8, 10-14,18-21, 23-25, 27-31, 33-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7-8, 10, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Perkins (US# 1829236).

Perkins discloses a pipe coupling having a generally cylindrical metal sleeve (figure 2), having first and second sides, at least one rigid and radially inwardly directed annular corrugation on the first side of the sleeve being adapted to cooperatively engage the annular corrugation on the first pipe section end, and a bell 21 on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve. Perkins discloses the sleeve as being split (column 1, line 56). The method limitation of the sleeve being formed from a flat sheet fails to further structurally define the coupling over that of Perkins.

Regarding claim 10, Perkins discloses a gasket 25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-8, 10-14, 18-20, and 25, 27-31, 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claes et al (US#5326138).

Claes et al disclose a pipe coupling having a generally cylindrical sleeve C, having first and second sides, at least one rigid and radially inwardly directed annular corrugation 10 on the first side of the sleeve being adapted to cooperatively engage the annular corrugation on the first pipe section end, and a bell on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve. Claes et al lack the disclosure of the coupling being made of metal. Material selection is well known in the art, and both plastic and metal are known as suitable equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of Claes et al from metal to simplify manufacture and decrease the cost of the device. Note the instant specification discloses both metal and plastic as preferred materials, and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Claes et al also lack forming the sleeve from a flat sheet. It is well known in the art to form couplings from sheet material. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the coupling of Claes et al from a flat sheet as an obvious manufacturing

process allowing the use of inexpensive sheet material, reducing the costs of the device.

Regarding claims 1 and 8, see figure 1.

Regarding claims 25 and 31, Claes et al disclose a radially inwardly directed annular projection 44 (see figure 7).

Regarding claim 12, Claes et al disclose a fluted gasket 30.

Regarding claims 20 and 41, Claes et al disclose all the limitations of the instant claims with exception to sealant. The use of sealant is well known in the art to provide a fluid tight connection. It would have been obvious to one of ordinary skill in the art to utilize sealant in the connection of Claes et al to further increase the sealing capabilities of the connection.

Regarding claims 14 and 36, Claes et al lack a flat gasket, instead, showing a fluted gasket. Flat gaskets are well known in the art. It would have been obvious to one of ordinary skill in the art to utilize a flat gasket in place of the fluted gasket of Claes et al as an obvious alternate means for providing the seal.

Claims 6, 18, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US#1829236).

Regarding claims 6 and 18, Perkins discloses all the limitations of the instant claims with exception to an outwardly extending flange on the bell. Flanges are well known in the art to aid in the assembly of couplings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an outwardly extending flange on the bell of Perkins to aid in the assembly of the device.

Regarding claim 20, Perkins discloses all the limitations of the instant claim with exception to sealant on the first side of the sleeve. Perkins suggest the use of sealant in one embodiment (column 3, lines 17-20) to reliably seal the joint. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further include sealant in the embodiment of figure 2 as taught in the embodiment of figure 3 to further seal and secure the joint.

Regarding claim 21, and 23-24, Perkins discloses all the limitations of the instant claim with exception to the method steps of forming the coupling from a flat sheet and wrapping the sheet around the first pipe to secure it. Perkins disclose forming the coupling of metal and that it may be split. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the split coupling from sheet material and further wrap it around the pipe end as an obvious means of assembly of the pipes and coupling.

Response to Arguments

Applicant's arguments filed 2/27/2004 have been fully considered but they are not persuasive.

Regarding the steps of forming the coupling from a flat sheet, the claims are directed towards the final product of an assembled coupling. The method steps fail to further structurally define the assembled coupling.

Regarding Claes et al, Figure 7 shows an inwardly directed annular portions 44c, 46, which projects inward of diameter 44a-b. It is maintained that the rejections are proper.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

Art Unit: 3683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BTK
May 12, 2004


DOUGLAS C. BUTLER
PRIMARY EXAMINER
5-12-04
Av 3683